

[NAME OF DOCUMENT]      ABSTRACT OF THE DISCLOSURE

An object is to provide a vector control apparatus for an induction motor which is capable of correcting a set value of a mutual inductance so as to match an actual value thereof by addition of software processing without addition of any particular device. A vector control apparatus (1) for an induction motor according to the present invention includes a mutual inductance correction section (3) that obtains a correction value of a mutual inductance of the induction motor (15) based on an error between a torque calculation value calculated by using a measured value of a primary current of the induction motor (15) and a torque command value to the induction motor (15) generated by a torque command generation section, and a vector control section (2) that controls the induction motor by using a circuit constant of the induction motor (15) including the correction value of the mutual inductance in such a manner that a torque generated by the induction motor (15) coincides with the torque command value.